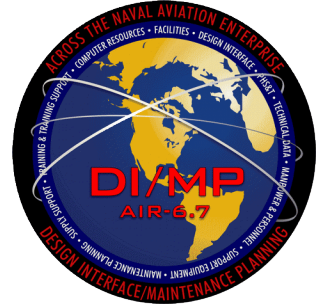


Counterfeit Materiel

-DoD/DLA Counterfeit Materiel IPT



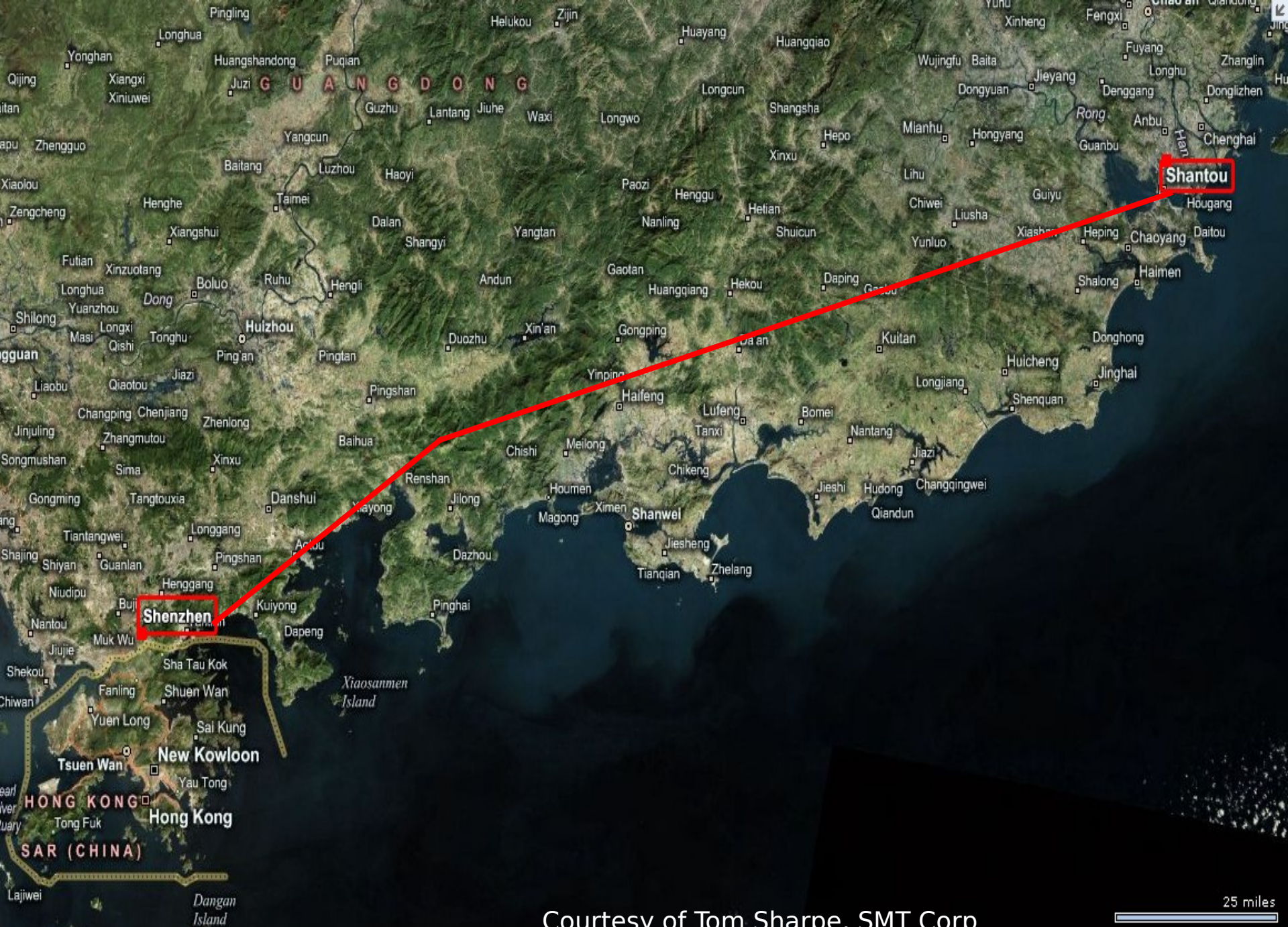
- Any materiel whose identity or pedigree has been **deliberately altered, misrepresented** or offered as an **unauthorized product substitution** is counterfeit documentation
- <http://www.pbs.org/frontlineworld/stories/ghana804/>

The Web of International Parts Trafficking

Known and Suspected Routes of e-waste Dumping

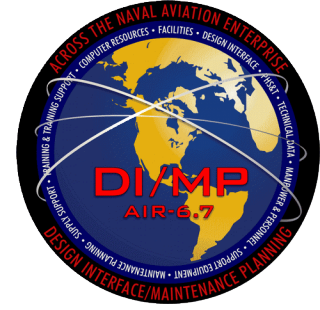


There is currently no system for tracking legal or illegal (under international law) shipments of electronic waste, and therefore, there is no quantitative data on volumes or even all of the true destinations. Some electronic waste is shipped as "working equipment" only to end-up as waste upon arrival. This map indicates information collected through investigations by organizations such as the Basel Action Network, Silicon Valley Toxics Coalition, Toxics Link India, SCOPE (in Pakistan), Greenpeace and others.



Courtesy of Tom Sharpe, SMT Corp

25 miles



Vehicle Inspection Point Just Outside City of Shantou



陆

吉利的好日子

超宽车道

绿色通道

交通警察 TRAFFIC POLICE

Courtesy of Tom Sharpe, SMT Corp



Courtesy of Tom Sharpe, SMT Corp



Courtesy of Tom Sharpe, SMT Corp



Shantou
warehouse: Boards
stacked, waiting for
chip removal.



红玫
广东中烟工业公司出品
广州市天河区林和西横路203号

Courtesy of Tom Sharpe, SMT Corp



Workers extract plastics from discarded electronics in Guiyu, a few hours' drive northeast of Hong Kong. The city has 5,500 family workshops handling e-waste.
© 2006 The Seattle Times Company



Laborer de-soldering circuit boards over a coal-fired grill. Rock in the box is where boards are hit to remove solder. Pliers are used to pluck off chips which go into various buckets. The boards are then tossed into a pile for open burning. © BAN

Washing components in river



Components on river bank drying



Courtesy of Tom Sharpe, SMT Corp



Courtesy of Tom Sharpe, SMT Corp



Courtesy of Tom Sharpe, SMT Corp



Courtesy of Tom Sharpe, SMT Corp



Courtesy of Tom Sharpe, SMT Corp



Courtesy of Tom Sharpe, SMT Corp



Courtesy of Tom Sharpe, SMT Corp



Handwritten notes in Chinese on a white paper in the bottom left corner, listing various electronic components and their quantities. The text is written in black ink and includes terms like 'IC', 'IC package', and 'IC component'. The notes are organized into several lines, with some components listed in multiple lines. The handwriting is somewhat cursive and difficult to read precisely, but it appears to be a list of parts and their counts.

Handwritten notes in Chinese on a white paper on the right side of the workbench. The text is written in black ink and includes terms like 'IC', 'IC package', and 'IC component'. The notes are organized into several lines, with some components listed in multiple lines. The handwriting is somewhat cursive and difficult to read precisely, but it appears to be a list of parts and their counts.

Courtesy of Tom Sharpe, SMT Corp



City of Shenzhen

China's main entry point
of counterfeit
electronics into the
global marketplace



赛博数码广场

指定专营店
易天

易天 手机数码

Nikon

D60

GPS卫星导航专家
GPS手机

Oitell 易天

三星 Anycal

港林地产

SONY

中国加油!

鱼美人

减肥中心

广告位

Courtesy of Tom Sharpe, SMT Corp



Courtesy of Tom Sharpe, SMT Corp

Department of Commerce Study



- **NAVAIR funded an impact study**

- **Released 13 Jan 2010**
 - **<http://www.bis.doc.gov/defenseindustrialbaseprograms/osies/defmarketresearchrpts/default.ht>**

Survey results



- DLA Comments

- FRC Comments

Department of Commerce Study



□ Recommendations

- provide clear, written guidance to personnel on part procurement, testing, and inventory management;
- implement procedures for detecting and reporting suspect electronic components;
- purchase parts directly from OCMs and/or their authorized suppliers when possible, or **require part traceability** when purchasing from independent distributors and brokers;
- establish a list of **trusted suppliers**
- utilize third-party escrow services to hold payment during part testing; adopt realistic schedules for procuring electronic components;

Department of Commerce Study



□ Recommendations

- perform **site audits** of supplier parts inventory and quality processes where practical;
- maintain an internal database of suspected and confirmed counterfeit parts; and
- **report all suspect and confirmed counterfeit components** to federal authorities and industry associations.



OSD-ATL and DLA IPT

Definition: Any materiel whose identity or pedigree has been **deliberately altered, misrepresented** or offered as an **unauthorized product substitution** is counterfeit.

Scope: Supply chains with known vulnerability to counterfeiting / unauthorized product substitution.

Outcome: Establishment of a DoD Anti-Counterfeit Program

1. Policy
2. Training
3. Standardization Process
4. Reporting (GIDEP, Law Enforcement)
5. Metrics

Training



Procurement

- QSLD
- Sourcing
- Risk Management

Receiving

- Documentation
- Receiving Inspections

Technicians / Artisans

- Identification
- Reporting-PQDR or RODS

Leadership / Management

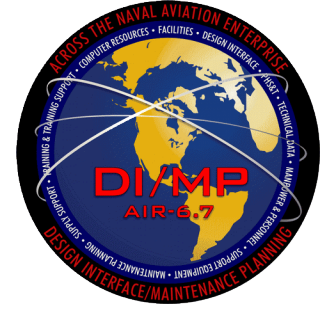
- Awareness
- Counterfeit Plan and Process
- Reporting
- Metrics

DLA Initiatives

5961/5962



- **FY08 Product Quality Deficiency Report (PQDR)**
- **244 Valid PQDR's**
- **161 (66%) Contractor Caused**
 - **91 (56.4%) Unapproved Substitution**
 - **32 (19.9%) Manufacturer Defect**
 - **23 (14.3%) Suspect Counterfeit**
 - **15 (10.8%) Other**



SAE AS 5553

Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition

Sources of Supply

- ORIGINAL COMPONENT MANUFACTURER

- FRANCHISED DISTRIBUTOR

- INDEPENDENT DISTRIBUTOR

- BROKER DISTRIBUTOR

SAE AS 5553

Counterfeit Electronic Parts; Avoidance,
Detection, Mitigation, and Disposition

ADOPTED by DoD 31 Aug 2009



PARTS AVAILABILITY

PURCHASING PROCESS

RISK STACK CHART

SUPPLIER ASSESSMENT PYRAMID

PROCUREMENT RISK MITIGATION

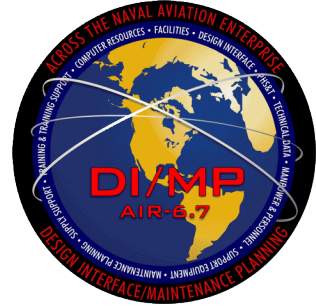
SUPPLY CHAIN TRACEABILITY

PROCUREMENT CONTRACT REQUIREMENTS

SAMPLE CONTRACT CLAUSES

SAE AS 5553

Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition



PRODUCT ASSURANCE

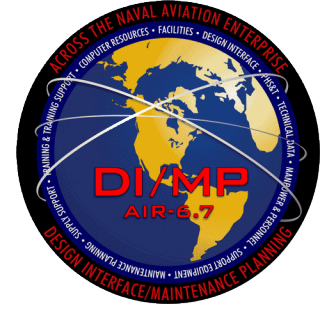
**SAMPLE AUTHENTICITY VERIFICATION PROCESS FLOW
TEST EVALUATION RISK STACK CHART**

MATERIAL CONTROL

**CONTROL OF SCRAP OR SURPLUS PARTS OR ASSEMBLIES
Control of Suspect or Confirmed Counterfeit Parts**

REPORTING

**Government Industry Data Exchange Program (GIDEP)
ERAI
Government Investigative Authorities
Law Enforcement Agencies**



Summary

- DoD's Next Step

1. **Policy**
2. **Training**
3. **Standardization Process**
4. **Reporting (GIDEP, Law Enforcement)**
5. **Metrics**

- NAVAIR/FRCs Actions

Counterfeit Component Plan

Procedures/ Process

Identification Training

Reporting

Questions ?

